ABSTRACT

A capturing unit captures and digitizes a printed image having an electronic watermark embedded therein and a lattice pattern image. A profile creation unit detects position deviations of intersections in the lattice pattern images captured at respective different zoom magnifications, generates correction information on distortion occurring in the images, and registers the correction information into a profile database in association with the zoom magnifications. An image correction unit selects correction information corresponding to a zoom magnification employed at the time of capturing of the printed image from the profile database, and corrects distortion occurring in the captured image of the printed image. An image area determination unit determines an original image area in the distortion-corrected captured image. A watermark extraction unit extracts watermark information from the original image area in the distortion-corrected captured image.